



## PENSION OBLIGATION BONDS: RESURGENCE OF TAXABLE MUNIS

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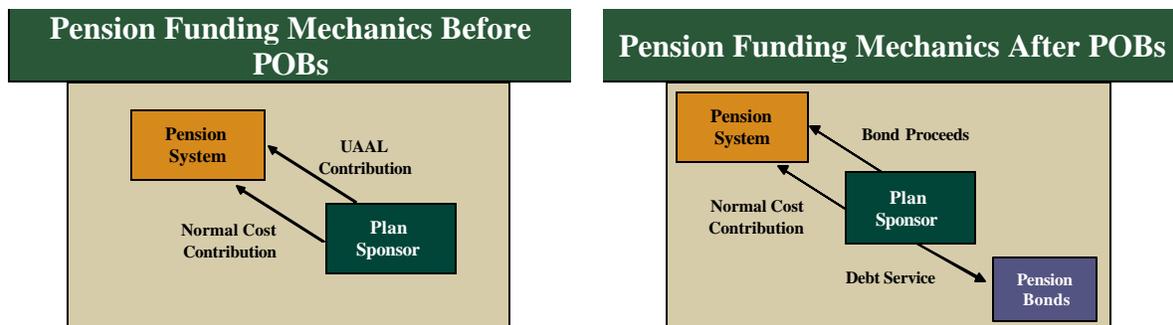
In 2003, state and municipal agencies issued an astounding \$17.725 billion of Pension Obligation Bonds (POBs), a six-fold increase from 2002. In addition to the sheer volume of POBs issued, the diversity of POB issuers, both geographically and in terms of the type of issuer, was remarkable. The purpose of this article is to provide a context for the resurgence of POBs in the municipal market, as well as to share one California issuer's actual experience with the POB market.

### What are POBs?

POBs are bonds issued by states and local municipalities ("Plan Sponsors") to refund, in the capital markets, all or a portion of their Unfunded Actuarially Accrued Liabilities (UAAL) owed to their pension system (commonly referred to as the "Plan"). In California, the repayment source of these obligations is an absolute and unconditional pledge of the agency's General Fund, though no taxing power is pledged. POBs are not issued by pension systems, nor are the pension systems liable for the bonds. While certain state pension systems have municipal bond liquidity and/or credit support programs, generally these programs are limited to backstopping financings for capital facilities, and to date, there have been no pension fund backed POBs. Other repayment mechanisms are certainly viable, and the POBs in other states have been issued as full faith and credit General Obligation bonds, as well as annual appropriation credits.

In a POB financing, the Plan Sponsor issues POBs and uses the bond proceeds to retire all or a portion of its UAAL, capturing the spread between lower current taxable bond market rates and the Plan's actuarially projected earnings rate, which is effectively the Plan Sponsor's interest cost. The POB debt service derived from the taxable bond market is lower than the actuarially prescribed employer contributions that reflect the Plan's higher earnings assumption.

Figure 1



As illustrated by Figure 1, in the ordinary course of business, Plan Sponsors generally make employer contributions consisting of two components: the normal cost, which is the cost of funding current and future benefits on an actuarially sound basis; and the UAAL, which is the cost to amortize previously accrued but unfunded benefits. Implicit in the UAAL component is the Plan's actuarially prescribed annual earnings rate, which is frequently 8.00 percent to 8.25 percent. This is the effective interest cost to the Plan Sponsor for having an unfunded liability, and refinancing this obligation in the bond market is what produces the savings attributable to POBs.

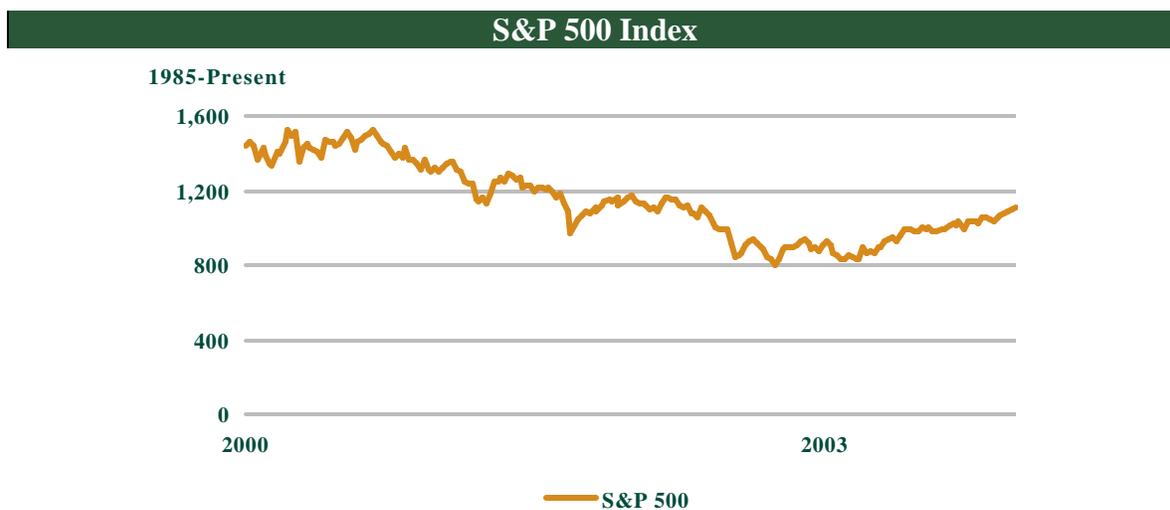
Once the UAAL has been retired, the employer contribution for that UAAL is eliminated and replaced with the cost of retiring the POBs. As noted later, in the “Risks of POBs” section, it is important to keep in mind that POBs extinguish the UAAL at a moment in time, and future UAALs (or surpluses) can occur, so POBs should not be viewed as a pension-funding panacea.

### Why are POBs back?

Four primary factors occurred in 2003 that contributed to a resurgence of POBs:

**1) Reduced Portfolio Valuations.** Pension fund earnings in FY 2001-2003 were substantially below most Plans’ earnings assumptions, with actual losses in 2001 and 2002 and sub-par earnings in 2003. For example, in FY 2001, CalPERs returned -7.2 percent and -5.9 percent in 2002, with a gain of only 3.9 percent for FY 2003. Compared with an annual earnings assumption of 8.25 percent, that represents a cumulative shortfall of 36.12 percent on a compounded basis. Plans with heavier equity asset allocations experienced similar losses during this period, as illustrated by the S&P 500 in Figure 2.

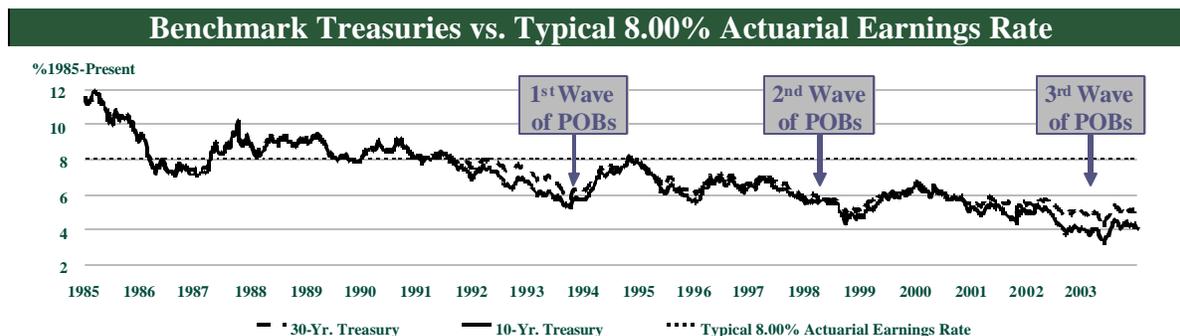
Figure 2



**2) Enhanced Retirement Benefits.** During the late 1990s, when double-digit nominal returns were the standard for many Plans, many Plan Sponsors adopted substantially enhanced retirement benefit packages, which dramatically increased the Actuarially Accrued Liabilities (AAL) of their Plans. For example, many local agencies in California adopted “3 percent at 50” plans for public safety, enabling public safety employees to retire as early as age 50 and receive a pension equal to 3 percent of earned compensation for each year of service, generally with a Cost of Living Adjustment (COLA), for life. In many cases, these increased benefits were projected to be “costless” to the Plan Sponsors as Plan surpluses were projected to offset the increased AALs. However, by reducing the age required to retire and increasing the pension payout, at the same time that portfolio returns fell dramatically, such benefit packages appear to be exerting extreme, unanticipated downward pressure on their Plans’ funding ratios.

**3) Historically Low Interest Rates.** As illustrated by Figure 3, in 2003, the U.S. Treasury market fell to its lowest level over the period shown, with the 10-year U.S. Treasury Note dipping to 3.10 percent and the 30-year U.S. Treasury Bond hitting 4.17 percent before backing up mid-year after the Federal Reserve disappointed the market by only cutting the Federal Funds rate by 25 basis points in June 2003. Although this rate cut was less than what the market had priced into U.S. Treasury rates, it represented the 12th cut of the rate cycle, bringing Federal Funds rate to a remarkable 1 percent.

Figure 3



**4) Widespread Fiscal Stress at all Levels of Government.** Reflecting a still sluggish economy and depressed tax receipts, state and local governments across the U.S. faced large deficits in early 2003 as they struggled to piece together their FY 2003-04 budgets. POBs offered them a proven tool for achieving significant budget relief by refinancing, and in some cases, restructuring pension payments. As was the case with tax-exempt long-term municipal issuance, which surged to a stunning \$383 billion in 2003, POB issuance took off in 2003 as Plan Sponsors exploited the extraordinarily wide gap between their cost of funds and their Plans’ assumed earnings rates, bringing the national total of municipal POBs issued to \$17.725 billion.

Of this total, California local agencies issued seven POB financings in 2003, with a gross par value of \$1.3 billion. Several states joined the POB sector in this year for the first time, with jumbo offerings from Oregon (\$2 billion), Wisconsin (\$1.8 billion), and Illinois (\$10 billion). Even General Motors Corporation, one of the largest issuers of debt in the corporate market, took advantage of this funding opportunity, issuing a record \$13 billion of taxable bonds to shore up its lagging pension fund. The State of California enacted POB legislation for up to \$1.9 billion, but the bonds were not issued due to contested validation proceedings.

**POBs versus Traditional Municipal Obligations**

Taxable POBs differ from traditional tax-exempt municipal obligations in several important ways, beyond the differences in market interest rates. The most significant of these other differences are: structural flexibility, pricing methodology, and the investor base.

**1) Structural Flexibility.** Unlike Certificates of Participation or Lease Revenue Bonds, where the underlying security for the bonds is a lease to the governmental entity, with most POBs the obligation is an absolute and unconditional General Fund pledge, though no taxing power is pledged (typically a limited tax general obligation bond requiring a judicial validation). Liberated from state law considerations relating to lease financings (e.g., substantially level debt service and the need for beneficial use/occupancy) and ineligible for federal tax-exemption, POBs enjoy considerable structural flexibility. To date, POB offerings have included a wide array of financing tools including variable rate demand bonds, auction rate securities, capital appreciation bonds, convertible capital appreciation bonds, \$25 par callable retail securities, swaps, and swaptions. Debt service can be structured to produce level annual savings, upfront savings, and savings patterns customized to various issuers’ unique budget goals and debt profiles. Given the plethora of viable products in the taxable market and the global nature of the taxable investor base, there is an almost limitless menu of products and debt structures that can be utilized.

**2) Pricing Methodology.** Unlike tax-exempt municipals, which are priced on an “absolute” yield basis (i.e., orders are taken at specific yields and adjusted for demand), in the taxable market orders are taken on a “spread” to the comparable U.S. Treasury security, though in certain cases the London InterBank Offered Rate (LIBOR) serves as the benchmark. For example, during the “indication period” (somewhat comparable to the pre-marketing period for a tax-exempt issuance) the bonds due in 2005 to 2013 would be marketed at a spread to the “on the run” (i.e., new issue) U.S. Treasury obligation of comparable term, the bonds due in 10-15 years would be priced off the 10-year U.S. Treasury Note, and the longer-term securities would be priced off the 30-year U.S. Treasury Bond (e.g., the 5.375 percent coupon bond due February 2031). See Figure 4 for these spreads.

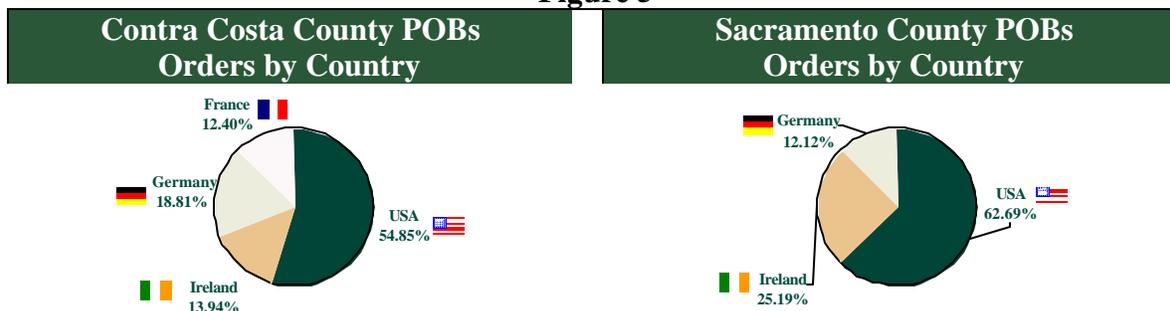
**Figure 4**

**Example of Recent Treasury Yields and Spreads**

	Benchmark Treasury Yield	Spread	Yield
8/15/2005 2 1/8 due 8/05	0.96%	0.10%	1.06%
8/15/2008 3 1/4 due 8/07	2.09%	0.30%	2.39%
8/15/2014 4 1/4 due 8/13	3.67%	0.50%	4.17%
8/15/2019 4 1/4 due 8/13	3.67%	0.50%	4.17%
8/15/2024 5 3/8 due 2/31	4.67%	0.45%	5.12%
8/15/2034 5 3/8 due 2/31	4.67%	0.55%	5.22%

**3) Investor Base.** The third pronounced difference between traditional tax-exempt and taxable municipal market is the investor base for POBs. Compared to the tax-exempt municipal market, where retail investors and bond funds often play dominant roles, in the taxable POB market retail investors are virtually non-existent, and foreign investors—particularly European banks—can comprise 40 percent to 60 percent of the investor base. Figure 5 illustrates the geographic investor distribution from two long-term fixed rate POBs issued last year by Contra Costa and Sacramento counties.

Figure 5

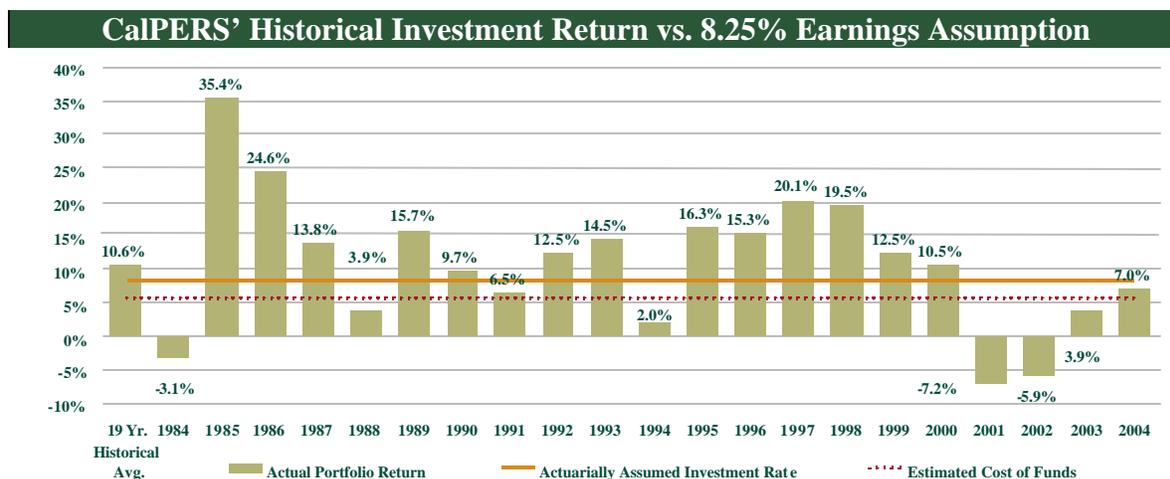


**Risks of POBs**

POBs are not risk free, and Plan Sponsors should carefully evaluate the potential risks of issuing POBs. Among the issues to consider are:

- 1) **UAAL is a Snapshot** Issuing POBs extinguishes the UAAL that exists at a specific point in time. New retirement benefits and other actuarial dynamics can create a new UAAL or produce an actuarial surplus, which may give rise to external pressures for additional employee benefits. While POBs can be a very effective financial management tool, they do not eliminate pension-funding risks.
- 2) **Impact on Federal Reimbursements.** For local agencies that receive federal grant funding, it is important to confirm that POBs do not adversely affect the ability to include the cost of funding employee retirement benefits in the grant claiming process. Generally, if the POB debt service is less than the actuarially prescribed employer contributions absent POBs, claiming is allowed. However, the rules on claiming are not well developed, and caution is advised when considering POBs that extend the term of amortizing a UAAL, as well as POBs issued to restructure outstanding POBs.
- 3) **Underperformance of Plan Investments Versus POB Cost of Funds.** There are no guarantees that the pension system will earn its actuarial earnings assumption. Although tremendous actuarial and investment management expertise and analysis go into the development of the earnings assumption, it is the Plan’s actual earnings performance that ultimately determines whether POBs were beneficial. The “break even” is not whether the Plan earns the 8.00 percent or 8.25 percent earnings assumption, but whether it outperforms the cost of POBs, which is currently in the 5.25 percent to 5.50 percent range (see Figure 6 as an example).

Figure 6



Also, market timing matters. While the Plan may earn the Plan Sponsor’s POB cost of funds over time, gains or losses in the near-term will have an amplified impact on the eventual outcome. It is worth noting, however, that if a Plan that is projected to earn 8.00 percent to 8.25 percent over the long-term does not earn at least 5.25 percent to 5.50 percent, the Plan Sponsor will likely face a significant UAAL, reflecting the earnings gap on the entire Plan. The most important lesson to learn from evaluating POBs is that being in the defined benefit business exposes Plan Sponsors to significant investment risk. Often times a pension plan may represent both a municipality’s single largest asset and its single largest liability, frequently dwarfing its total amount of outstanding tax-exempt debt. Therefore, local agencies should exercise caution and conduct thorough analyses of the benefits and disadvantages of issuing POBs for their agency.

## Rating Implications of POBs

Pension funding has been a relevant topic in both the corporate and public sectors, with well-publicized funding failures affecting some of the best known corporations and public agencies in the U.S. Unfunded liabilities now threaten the fiscal health of some of the nation's largest governmental and corporate institutions. Accordingly, pension funding status—not the format or tools used to fund UAALs—has become a fundamental credit metric. The major credit rating agencies' perspectives on POBs have evolved considerably over the last 18 months.

Pension liabilities are now considered tantamount to debt. Given that retirement obligations are constitutionally guaranteed in many states, and there is ample case law requiring municipalities to honor their contractual pension funding obligations, the credit rating agencies now generally include pension liabilities in evaluating issuers' credit characteristics and debt burdens.

Large UAALs and/or low funding ratios may not independently lead to negative rating action, as such liabilities can result from numerous factors (benefit increases and investment losses being the most prominent), and the rating agencies are unlikely to penalize issuers for broadly occurring stock market losses. However, UAALs resulting from a persistent, conscious inability to make actuarially required contributions are viewed as a sign of fiscal stress and a reluctance to face the full costs of policy decisions. Just as the credit rating agencies take into consideration labor contracts and other potentially large financial exposures and contingent liabilities, they will evaluate:

- 1) whether an agency has quantified/acknowledged its pension exposure;
- 2) has adopted a sound plan for addressing the UAAL; and
- 3) how the pension-funding plan relates to an agency's resources and budget

The "bottom line" is that, from the credit rating agency perspective, pension costs are a material credit consideration and cannot be ignored. Therefore, they should be fully disclosed.

## Future Outlook

The "third wave" of POBs (as illustrated in Figure 3) likely will continue into 2004 as municipalities nationwide face the lingering effects of a slow economy. In California, issuance likely will be robust because of the trickle down impact of the State's current structural budget deficit, which may include various program cuts and shifting of responsibility to the local level. Any such actions would place greater pressure on local agency general fund budgets to provide services. POBs are certainly not a pension funding panacea; however, they do represent a proven, viable tool available to help municipal agencies manage their pension liabilities in the context of their overall budget priorities and debt management policies.

## Case Study: San Luis Obispo County's Experience

In June 2003, San Luis Obispo (SLO) County issued \$137 million in POBs. San Luis Obispo County's experience with that transaction—from the decision process to the eventual offering—illustrates many of the key considerations relevant to POBs.

## Overview of SLO County Pension Trust

The SLO County Pension Trust ("Trust") currently covers approximately 1,060 retirees and 2,800 active County employees. Figure 8 provides a historical perspective of the Trust's funding status thru the last actuarial valuation that preceded the issuance of POBs. Prior to the decision to issue POBs, the UAAL was amortized as a level percentage of payroll over a 40-year term.

**Figure 8**

SLO Pension Trust Funding Progress Indicators <sup>1</sup>				
	Actuarial Value of Assets (\$000)	Actuarially Accrued Liability (\$000)	AAL/(UAAL)	Funded Ratio
12/31/93	181,301	172,939	8,362	104.8%
12/31/94	199,146	190,233	8,913	104.7%
12/31/95	219,463	217,562	1,901	100.9%
12/31/96	244,184	251,600	(7,416)	97.1%
12/31/97	269,704	277,765	(8,061)	97.1%
12/31/98	299,697	309,352	(9,655)	96.9%
12/31/99	336,812	345,605	(8,793)	97.5%
12/31/00	371,648	446,334	(74,686)	83.3%
12/31/01	404,751	492,795	(88,044)	82.1%
12/31/02	430,351	556,321	(125,970)	77.4%

<sup>1</sup> 12/31/02 values do not include certain actuarial losses, increases in payroll and actuarial miscalculations that were included in 6/30/03 actuarial "bring down" which calculated UAAL at \$135 million.

From the date of the last actuarial valuation on December 31, 2002 to the issuance of the POBs, SLO County’s UAAL had grown to \$135 million, attributable to three primary factors: (i) investment returns below the Trust’s assumed 7.75 percent earnings rate (see Figure 9), (ii) enhanced retirement benefits (2 percent at 55) and (iii) certain actuarial miscalculations by the Trust’s prior actuary.

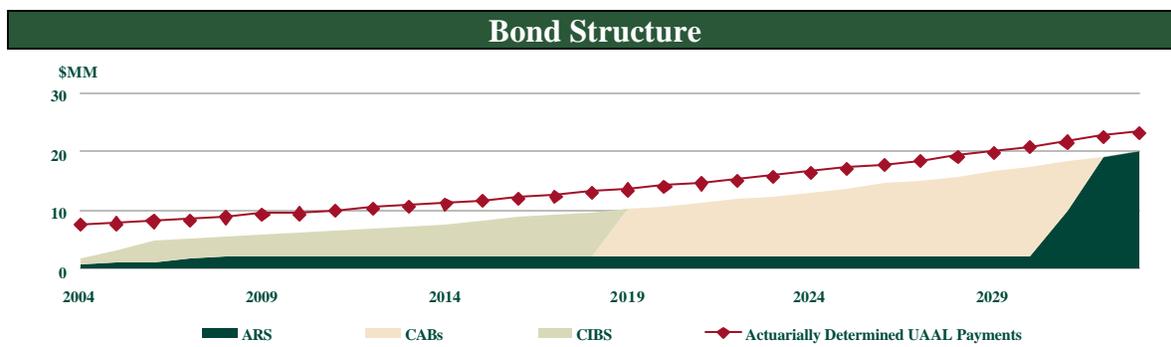
As part of the POB issuance process, SLO County worked with its underwriter (Lehman Brothers), financial advisor (Public Financial Management), Trust administrator and actuary to evaluate a number of alternative POB structures and funding approaches. Ultimately, SLO County elected to shorten the term of its UAAL amortization to 30 years, and the Trust’s actuary developed a payment schedule, which became the finance teams’ “structuring yardstick.”

The basis for deriving the UAAL payment schedule was the Pension Trust’s existing UAAL. Based upon the County’s UAAL, the actuary calculated a payment stream, that produced a “level percentage of payroll” which increased at an assumed annual salary growth of 4 percent and included interest at the assumed annual actuarial earnings rate, which in SLO’s case was 7.75%. Because the payment schedule was structured to enable the percentage of payroll to remain constant through maturity, the annually required payment was insufficient to cover the interest due on the UAAL to the Trust<sup>2</sup> — the principal amortization was negative until 2015 at which point payroll had grown sufficiently to “catch up” with the amortization schedule. If SLO County had not issued POBs, its UAAL would have continued to grow to an estimated \$156 million by 2015. This UAAL payment schedule was the benchmark against which all of the County’s POB options were measured for savings calculations.

**Bond Structure**

The County evaluated numerous structuring options, and considered several alternative choices for realizing its projected savings, ultimately selecting a very conservative structure that produced approximately level annual savings of about \$3.3 million. Given the steep upward sloping payments, SLO County found it necessary to include a substantial component of Capital Appreciation Bonds (CABs), or zero coupon bonds, in the middle maturities (see Figure 9). These are bonds that pay no regular coupon but instead accrete at a stated interest rate to a future maturity value. Because CABs generally cannot be marketed cost-effectively with call provisions, SLO County also chose to include in the bond structure \$35 million of multi-modal Auction Rate Securities to increase its flexibility for future refinancings or restructurings of its POBs.

**Figure 9**



Auction Rate Securities (ARS) were used for the longest maturities, providing a substantial interest rate savings to SLO County compared to long-term current interest bonds (“CIBs”) or CABs, and the ARS also provided SLO County with considerable future flexibility since they can be called on any auction date. SLO County’s underwriter pre-marketed the ARS with an initial term of 2, 3 and 4 years, and SLO County ultimately opted to lock in an initial rate for three years at 2.36 percent. This three-year term provided SLO County with significant savings versus 30-year bonds, budget certainty for three years, and the ability to call and/or restructure the bonds after three years. At the end of the initial term, SLO County will have the ability to choose from a variety of interest rate modes, ranging from seven days to multi-annual terms.

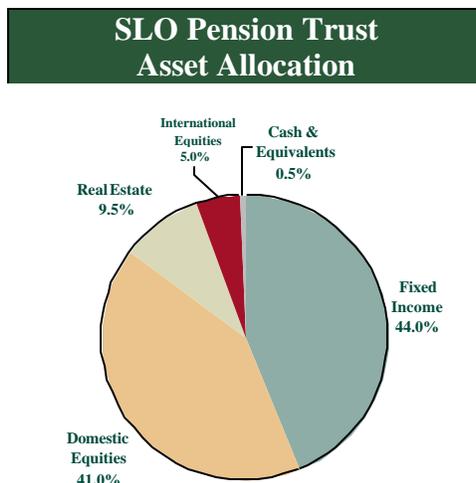
The POBs were priced on June 26, 2003, one day after the Federal Reserve’s 25 basis point rate cut, which started a long sell off in the bond market that lasted through most of the summer. However, with a strong marketing effort and its customized bond structure, SLO County succeeded in achieving a projected true interest cost of 5.12 percent<sup>3</sup>, which, compared to the Trust’s 7.75 percent earnings assumption, is projected to produce almost \$100 million of savings to SLO County over the life of the bonds.

## Unique SLO County Considerations

There were certain aspects of SLO County's financing that may not exist for every municipality:

- 1) **Shorter Amortization.** The POB provided an opportunity for SLO County to reduce its UAAL amortization period from 40 years to a more conservative 30 years while still achieving annual budgetary savings of \$3.3 million.
- 2) **Reinvestment Risk.** Proceeds of the 2003 POBs were invested by the Trust in its existing conservative asset allocation, which is more heavily weighted towards real estate and fixed income than many pension plans (see Figure 10). While the Trust did not enjoy some of the high returns of the late 1990s, its conservative asset allocation served it well during the stock market downturn of 2000-2002. Additionally, the proceeds from the POB sale constituted less than 1/3 of the existing SLO Trust assets. Inherently, reinvestment market timing risk is less when the POB proceeds represent a smaller percentage of total assets.

Figure 10



- 3) **Rates/Benefits Smoothing.** SLO County uses a Trust funding method that allows for small fluctuations in funding ratios, thereby negating the need for immediate adjustments to contribution rates or benefit levels. The SLO County Administrator also enjoys a stable working relationship with pension trustees. This reduces the possibility of unilateral decisions that might adversely affect SLO County or the Trust in the future.
- 4) **Variable Rate Exposure.** Prior to the POB, SLO County had a relatively small general obligation debt load, and no variable rate debt. Thus, allocating a portion of the POB to variable ARS provided additional savings and flexibility to SLO County without excessive exposure to rising interest rates in the future.

The SLO County experience with POBs has, so far, been quite positive. When it comes to pension funding issues, there are no quick solutions, but the SLO experience has shown that a prudently structured, well conceived POB plan of finance can produce considerable budget benefits as well as strengthen the overall balance sheet of the Plan Sponsor.

*This Offprint was previously published in DEBT LINE, a monthly publication of the California Debt and Investment Advisory Commission (CDIAC). CDIAC was created in 1981 to provide information, education, and technical assistance on public debt and investment to state and local public officials and public finance officers. DEBT LINE serves as a vehicle to reach CDIAC's constituents, providing news and information pertaining to the California municipal finance market. In addition to topical articles, DEBT LINE contains a listing of the proposed and final sales of public debt provided to CDIAC pursuant to Section 8855(g) of the California Government Code. Questions concerning the Commission should be directed to CDIAC at (916) 653-3269 or, by e-mail, at [cdiac@treasurer.ca.gov](mailto:cdiac@treasurer.ca.gov). For a full listing of CDIAC publications, please visit our website at <http://www.treasurer.ca.gov/cdiac>.*

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